DYNACORD®

CL 1600 • CL 1200 • CL 800

Compact Linear Precision Power Amplifiers

The new **CL Series** amplifiers combine outstanding audio performance with maximum reliability and operating safety, as well as being noticeably lighter than equivalent power amplifiers.

As is tradition with the Dynacord amplifier heritage, a large amount of headroom above the specified nominal output has been achieved through the use of optimized power supplies with low dispersion torroidal transformers and class H technology (CL 800 class AB). Considerable weight reduction and energy conservation due to less heat dissipation are also a few of the advantages to the new CL Series.

As expected from a Dynacord design, the CL Series amplifiers can handle the toughest on the road abuse. Dynacord's protection package in every amplifier is matched by no other manufacturer, and the CL Series is no exception. They are reliably protected for thermal capacity, output overload and short cicuit, as well as high frequency osciliation and DC voltage in the output stage. A ´soft start´ relay circuit is employed to prevent annoying ´pops´ at start up and an additional circuit is used to limit current draw at start up, protecting breakers and fuses.

Dynacord amplifiers constantly monitor input- vs output- signal by means of superfast audio processors which send –in case of non linear operation – control parameters to the limiters. In order not to affect the dynamic range of music signal this circuit functions as an RMS limiter by affecting the input gain, reserving the full dynamic headroom of the amplifier.

Thermal stability is provided by a 3-stage fan with the lowest possible noise level. The inputs are electronically balanced and implemented on XLR connectors, and Direct Outs for looping the signal are also standard. Input routing permits a choice between Mono and Stereo modes. Mono bridged mode is also easily configured thanks to the separate Bridged Out connector and the Bridged Mode switch.

Highly precise, yet rugged potentiometers are recessed in the front panel to prevent physical damage and offer level control scaled in single decibel increments. The clearly laid out LED display shows the operating conditions of the power amplifiers by means of Power, Protect, Signal and Limit indicators.

The electronically balanced XLR input and output connectors are designed for direct operation with professional mixing consoles and signal processors. The complete CL Series power amplifier are designed for `Constant-Gain´ structure of 32dB. The power outputs for Channels A and B as well as the Bridged Out are available on reliable Speakon connectors. There is a Ground-Lift switch on the rear panel to separate the signal ground from the chassis ground to eliminate ground loops.

All CL power amplifiers can normally be operated with loads as low as 2 ohms and in bridged mode down to a minimum of 4 ohms with complete operational security.

For rackmount of the CL Series amplifiers there are differnt long ´Rear-Rackmount´ rails as accessories available.

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Technical Specifications	CL 800			CL 1200			CL 1600		
Load Impedance	2 ohms	**4 ohms**	8 ohms	2 ohms	**4 ohms**	8 ohms	2 ohms	**4 ohms**	8 ohms
Max. Midband Output Power THD = 1%, 1kHz	600 W	**400 W**	240 W	900 W	**600 W**	350 W	1100 W	**800 W**	500 W
Rated Output Power THD < 0,1%, 20Hz … 20kHz	----	**300 W**	150 W	----	**500 W**	250 W	----	**700 W**	350 W
Max. Single Channel Output Power Dynamic Headroom, IHF-A	1100 W	**580 W**	300 W	1450 W	**850 W**	450 W	2200 W	**1200 W**	625 W
Max. Single Channel Output Power Continuous, 1kHz	800 W	**480 W**	270 W	1200 W	**720 W**	410 W	1500 W	**950 W**	550 W
Max. Bridged Output Power THD = 1%, 1kHz	----	**1200 W**	800 W	----	**1800 W**	1200 W	----	**2200 W**	1600 W
Maximum RMS Voltage Swing THD = 1%, 1kHz	50 V			62 V			72 V		
Power Bandwith, ref. 1kHz THD =1%, half power @ 4 ohms	10Hz … 60kHz			10Hz … 60kHz			10Hz … 60kHz		
Voltage Gain, ref. 1kHz	32,0 dB			32,0 dB			32,0 dB		
Input Sensitivity rated power @ 8 ohms, 1kHz	+1,15 dBu (0,88 V rms)			+3,2 dBu (1,12 V rms)			+4,7 dBu (1,33 V rms)		
THD at rated output power MBW = 80kHz, 1kHz	< 0,05%			< 0,05%			< 0,05%		
IMD-SMPTE, 60Hz, 7kHz	< 0,02%			< 0,02%			< 0,02%		
DIM 30, 3,15kHz, 15kHz	< 0,01%			< 0,01%			< 0,01%		
Maximum Input Level	+22 dBu (9,76 V rms)			+22 dBu (9,76 V rms)			+22 dBu (9,76 V rms)		
Crosstalk ref. 1kHz, at rated output power	< -80 dB			< -80 dB			< -80 dB		
Frequency Response, ref 1kHz	15Hz … 40kHz (+/- 1dB)			15Hz … 40kHz (+/- 1dB)			15Hz … 40kHz (+/- 1dB)		
Input Impedance, active balanced	20 kohms			20 kohms			20 kohms		
Damping Factor, 1kHz	> 300			> 300			> 300		
Slew Rate	25 V/µs			25 V/µs			25 V/µs		
Signal to Noise Ratio, A-weighted	103,5 dB			105,5 dB			107,0 dB		
Output Noise, A-weighted	< -70 dB			< -70 dB			< -70 dB		
Output Stage Topology	Class AB			Class H			Class H		
Power Requirements	100V, 120V, 220V, 230V, 240 V; 50Hz … 60Hz (factory configured)								
Power Consumption 1/8 max. output power @ 4 ohms, +10%	550 W			600 W			660 W		
Protection	Audio limiters, High temperature, DC, HF, Back-EMF, Peak current limiters Inrush current limiters, Turn on delay								
Cooling	Front-to rear, 3-stage fans								
Safety Class	I			I			I		
Dimensions (W x H x D) mm	483 x 88,1 x 386,8			483 x 88,1 x 386,8			483 x 88,1 x 386,8		
Weight	13,5 kg (30,8 lbs)			15 kg (33 lbs)			16 kg (35,2 lbs)		
Optional:									
Rear Rackmount 15,5"	112 930 (NRS 90262)			112 930 (NRS 90262)			112 930 (NRS 90262)		
Rear Rackmount 18,0"	112 933 (NRS 90 264)			112 933 (NRS 90 264)			112 933 (NRS 90 264)		

Amplifier at rated conditions, both channels driven, 8 ohms loads, unless otherwise specified

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„ EVI Audio GmbH • Printed in Germany • subject to change without prior notice • Sept. 2003/1 • # 163070